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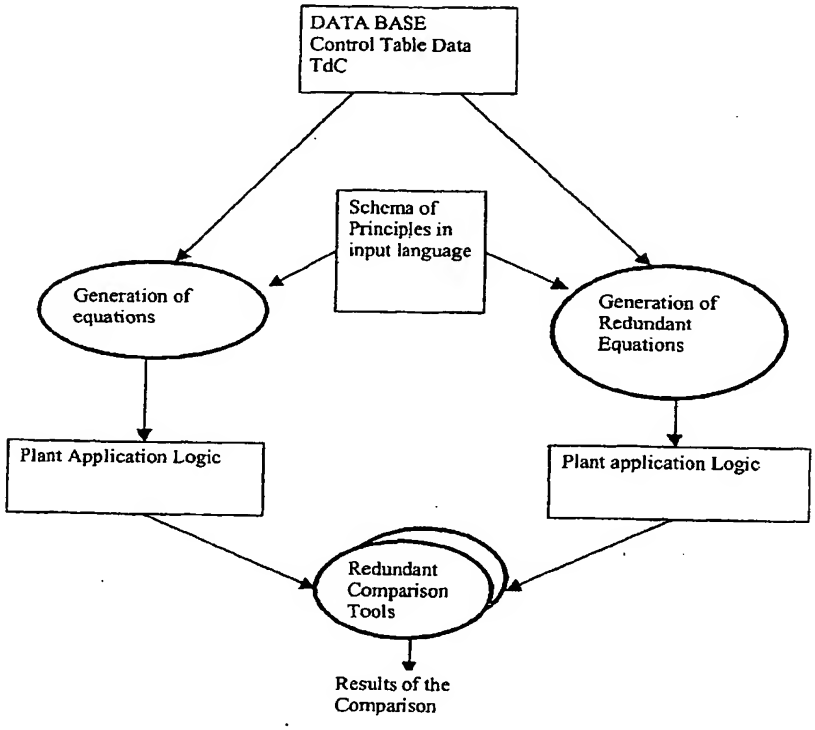
[Continued on next page]

(54) Title: METHOD AND DEVICE OF GENERATING LOGIC CONTROL UNITS FOR RAILROAD STATION-BASED VITAL COMPUTER APPARATUSES



(57) Abstract: A method of generating logic control units for railroad station-based vital computer apparatuses, i.e. in railroad station system control units comprising at least one vital computer which, on the basis of a control program operating in combination with a logic unit, sends state switching controls to so-called yard elements and receives state feedback and/or diagnostic signals from said yard elements, said logic unit being generated automatically by a program, based on the surrounding conditions as defined by the station diagram and by a state table, said logic unit being a network of circuits with components operating according to Boolean logic functions and appropriately structured in compliance with the station diagram and with the state table, or said logic control unit being a program which includes algorithms composed of Boolean logic functions, which operate like networks of Boolean logic circuits. According to the invention, a step for checking the correctness of the automatically generated logic unit is provided, which checking step includes the following steps: parallel generation of two logic control units, according to the same station diagram and the same state table, each being generated by a different generation program; comparison between the networks of logic circuits or network-simulating logic programs provided by the two different programs to check for structural differences.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
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According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 B61L G06F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)
EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 751 569 A (METEL OMER ET AL) 12 May 1998 (1998-05-12) the whole document	1,12
A	US 6 286 130 B1 (SHAH SANJIV M ET AL) 4 September 2001 (2001-09-04) abstract	1-14
A	EP 1 085 415 A (CIT ALCATEL) 21 March 2001 (2001-03-21) claims	1-14

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Date of the actual completion of the international search	Date of mailing of the international search report
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Name and mailing address of the ISA	Authorized officer
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